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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,961	08/15/2004	Scott L. Nielson		4960

22913 7590 06/28/2006

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EXAMINER

FREJD, RUSSELL WARREN

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/710,961	Applicant(s) NIELSON ET AL.	
	Examiner Russell Frejd	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Examination of Application #10/710,961

1. Claims 1-33 of application 10/710,961, filed on 15-August-2004, are presented for examination.

Claim Objections under 37 CFR 1.75(d)(1)

2. Claims 1, 3, 8, 9, 12, 14, 19, 20, 23, 25, 30, and 31 are objected to under 37 CFR 1.75(d)(1), wherein --

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a))

In regard to claims 1, 12 and 23, the use of the term "and" on lines 4 and 7, should be deleted, and the term "Selecting" on line 7 should not be capitalized.

In regard to claims 3, 14 and 25 on line 3; claims 8, 19, 30 and 31 on line 5; and claims 9 and 20 on line 4; the use of the period and the subsequent capitalization of the next word needs to be corrected.

Claim Rejections under 35 U.S.C. § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

- 3.1 Claims 1-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The invention claims (claim 1 preamble), "*A method to automatically create a three-dimensional nail object.*"

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3.2 MPEP Section 2106(IV)(B)(2)(b)(ii) provides that a statutory computer process is determined not by how the computer performs the process, but by what the computer does to achieve a practical application with a useful, concrete and tangible result. For example, a computer process that simply calculates a mathematical algorithm that models noise is nonstatutory, while a claimed process for digitally filtering noise employing the mathematical algorithm is statutory. The long line of cases in this area that are referred to in MPEP Section 2106(IV)(B)(2)(b)(ii) exemplify this requirement, by utilizing in the claim language, terms such as controlling, executing, changing and removing. In view of the aforementioned requirement and the interim guidelines for 101 eligibility, the Examiner respectfully contends that the claim language of independent claims 1, 12, and 23, do not claim a practical application with a tangible result, that language claiming: (in claim 1) **starting** (emphasis added) with a three-dimensional array of data representing a digitized nail surface; **measuring** key reference points along the tip of the nail surface along the X-axis, Y-axis, Z-axis and the periphery of the tip of the digitized nail surface; **selecting** a preexisting nail tip three-dimensional point array that closely matches the key reference points; and **duplicating** the digitized nail surface area and **raising** the duplicate surface area on the Z-axis to align with the top value of the selected nail tip, and **combining** the nail tip, the duplicated nail surface and the digitized nail surface into a new preferred three-dimensional artificial nail object that conforms to an expected result so that the new generated nail object will fit over the digitized nail surface and create a desired artificial nail appearance.

3.3 For at least these reasons, the Examiner respectfully posits that the claims of the present invention do not meet the criteria for a statutory process. Accordingly, the claims are determined

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to be a method to automatically create a three-dimensional nail object, consisting solely of mathematical operations, converting one set of numbers into another set of numbers, whereby the method does not manipulate appropriate subject matter, and thus cannot constitute a statutory process (MPEP Section 2106(IV)(B)(2)(c)).

3.4 The Examiner respectfully posits that claim 23-33 of the present invention do not meet the criteria for a statutory process, as these claims are determined to be a program per se, consisting of software modules that implement the method to automatically create a three-dimensional nail object, whereby the method does not manipulate appropriate subject matter, and thus cannot constitute a statutory process (MPEP Section 2106(IV)(B)(2)(c)).

Claim Rejections under 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4.1 Claims 1-3, 5, 6, 8, 10-14, 16, 17, 19, 21-25, 27, 28, 30, 32 and 33 are rejected under 35 U.S.C. 102(a) as being anticipated by Yogo et al., hereinafter Yogo, USP Publication 2004/0143359 A1.

4.2 In regard to claims 1, 12 and 23, a method to automatically create a three-dimensional nail object [sec. 0002], comprising: starting with a three-dimensional array of data representing a digitized nail surface [0009], and; measuring key reference points along the tip of the nail surface

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along the X-axis, Y-axis, Z-axis and the periphery of the tip of the digitized nail surface 0030, see “length” i.e. *tip* in 0032 and 0034], selecting a preexisting nail tip three-dimensional point array that closely matches the key reference points [0006]; and duplicating the digitized nail surface area and raising the duplicate surface area on the Z-axis to align with the top value of the selected nail tip [0034], and; combining the nail tip, the duplicated nail surface and the digitized nail surface into a new preferred three-dimensional artificial nail object that conforms to an expected result so that the new generated nail object will fit over the digitized nail surface and create a desired artificial nail appearance [0033 and 0034].

Claims 2, 13 and 24: wherein starting with a three-dimensional array of data representing a digitized nail surface includes any data that can be used to represent a three-dimensional object [0009].

Claims 3, 14 and 25: wherein the three-dimensional array of data may be represented as points of data representing an X-axis, Y-axis and Z-axis. The three-dimensional array of data may also include the points defining the periphery of the tip of the digitized nail surface [0030 and 0006].

Claims 5, 16 and 27: wherein measuring key reference points includes determining the arc of the digitized nail surface along the X-axis and/or determining the arc of the nail surface along the Y-axis [0033 and 0035 “top surface”].

Claims 6, 17 and 28: wherein measuring key reference points includes evaluating three-dimensional points along the periphery of the tip of the nail surface [0030 and 0034].

Claims 8, 19 and 30: wherein the duplicating of a digitized nail surface includes replicating the three-dimensional points of the digitized nail surface and manipulating those points on the Z-

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axis to gain a desired thickness to the final customized nail object. This replicated array of points will become part of the top surface of the customized nail object [0030 and 0034].

Claims 10, 21 and 32: wherein the combination of the duplicated nail surface, the selected tip and the digitized nail surface includes aligning the selecting tip to the duplicated nail surface to form the top of the customized nail object and then aligning the digitized nail surface to the other objects to form the customized fit and bottom of the customized nail object [0035].

Claims 11, 22 and 33: wherein the desired nail object in its final state is a customized three-dimensional object representing an artificial nail that is desired, which fits over the digitized nail surface [0033 and 0034].

Claim Objections

5. Claims 4, 7, 9, 15, 18, 20, 26, 29 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Yogo does not specifically disclose measurement values in millimeters or inches, modifying various nail tip objects, or a smoothing function.

Response Guidelines

6. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

6.1 Any response to the Examiner in regard to this non-final action should be

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directed to: Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, or the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

mailed to: Commissioner of Patents and Trademarks
P.O. Box 1450, Alexandria, VA 22313-1450

or faxed to: (571) 273-8300

Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.

Date: 24-June-2006

A handwritten signature in cursive script that reads "RUSSELL FREJD". The signature is written in dark ink and is positioned above a solid horizontal line.

**RUSSELL FREJD
PRIMARY EXAMINER**